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# AN INTRODUCTORY SURVEY OF THE BITUMINOUS COAL INDUSTRY

BY C. E. LESHER

*Editor Coal Age*

Picture, if you will, an industry, the foundation of modern industrial progress touching the daily life of nearly every individual in the country, simple almost as agriculture in its basic elements, as unorganized as the retail grocery business, limited on the one hand by almost inelastic market, on the other by transportation, over neither of which has it control, and you have before you the bituminous coal business as it is today and as it has been for the past thirty years.

Bituminous coal is power, and power is the essential of modern industry. We are no longer an agricultural nation, we are the largest workshop in the world. Manufactured goods now exceed raw materials and food products in our exports; the majority of our people live in the cities. The fallacy that we can distinguish between essential and nonessential users of coal has been exploded. All use of coal is essential, not necessarily because the product made in every plant is essential, but because the continuous and uninterrupted operation of every plant is necessary. Whole communities are often dependent for their existence and livelihood on single industries within their borders, and the operation of those industries is dependent on power, that is, on coal.

Coal is the first essential of all our progress. Coal is required to mine the raw materials of industry, coal, iron ore, all other minerals. Coal is required to thresh our wheat, to mine and prepare the fertilizers for the fields. Coal is required in large quantities to transport the raw materials to factory, the food to the people, and to move commodities to market here and abroad. On an ample and cheap supply of bituminous coal has been built the vast industrial machine we call the United States.

Coal is not the last thing required, it is the first, yet coal is treated in our national thinking as are such commonplace things as sand and gravel, slag, refuse, and waste products. Nowhere is this better shown than in the treatment of coal as traffic by the railroads. A low grade, nonperishable commodity, coal is given deferred movement. So ingrained in practice is the deferrment of coal by the railroads that during the war orders issued for prior movement of coal were treated lightly and results were accomplished only after the idea that the orders from above were for a purpose and that coal was a war necessity had soaked down the line to the lowliest switchman. Although none would deny the importance of transportation to coal, yet today no other commodity is forced to accept the rationing of cars. Whenever the

demand for cars suitable for transporting coal exceeds the supply, the steel mills, the sand and gravel pits, the farms, the sawmills, the automobile factories, are given what they requisition, and the left-overs are rationed out among the soft coal mines.

Except prices are high enough to excite public opinion, coal has never stirred the popular imagination as have other large industries. The romance of gold mining in the West, the spectacular history of oil, the fascination of railroading, and the wonders of the financial developments of the steel and allied industries have become commonplace to common people; but the truth about coal has never been made the subject of story and play, and few have cared to delve into the details of how coal—common black dirt—is mined and marketed. Coal, soft coal at least, has given the world no Rockefellers, Schwabs, Carnegies, Morgans, Goulds, Vanderbilts, or Tom Lawsons.

Perhaps the reason for this is found in the fact that coal is as simple in its economics as agriculture. In the United States deposits of coal are widely distributed, but two important sections of the country—New England and the Northwest—being without such natural resources. From the northern line of Pennsylvania to the center of Alabama is the most wonderful area of coal in the world. In the Mississippi valley, in the Rocky Mountain region, and even on the Pacific Coast are ample deposits of coal. So kind has nature been to us that in these vast areas of coal-bearing rocks one may have coal for the taking. It outcrops on the hillsides or is but buried by a shallow covering. Whereas the coal that enters commerce comes from a paltry six or seven thousand mines, thousands of farmers and inhabitants of small towns in the hills and on the plains have but to go to the country banks, the gopher holes, and strip pits, of which there are between ten and twenty thousand, for the coal to meet their ample needs.

So easy is the coal of access in most of these fields and so simple is the initial work of opening a mine that every period of unusual demand, in which prices rise more than a few cents above the cost of production, finds many entering the business. Whereas the development of 200 new mines of consequence each year will suffice to maintain capacity at the present rate of consumption, there were, it is reported, 1000 new mines opened this year in Central Pennsylvania alone, and this field produces but 10 per cent of the country's total soft coal. Having your own coal mine is almost as simple as having a war garden. Raising hogs, cotton, and corn are no more competitive than mining bituminous coal. Almost without exception, the rules of the land require that the railroads must give a prospective coal-mine operator a siding and give him cars for his product, that is, at least, a share of the cars. Furthermore, the rules favor the new mine, for if a mine is

rated as under development it is insured a definite minimum supply of empties. The scramble for traffic in the past has left us a legacy of precedent favoring the opening of coal mines that we could well have dispensed with the past four years.

Freight rates on the railroads have been designed to give the operators in each field a wide latitude in markets. There is scarcely a consumer but has the opportunity to choose his coal within wide ranges. The producer in Illinois and Indiana sells his coal in from eighteen to twenty states, and the consumer in Chicago can get his coal from twenty different fields in six states. It was clearly shown in the trial of the "smokeless" operators in New York in 1917 that even the smokeless coal of West Virginia meets competition in its every market to such an extent as to preclude the possibility of any combination in restraint of trade.

The coal deposits are so bountiful, the number of mines so great, and it is so easy to increase productive capacity, that monopoly in the bituminous coal industry is not possible today. Were there a group of capitalists strong enough to buy all the soft coal mines in the United States, tomorrow there would be other and new mines opened to compete with such a trust, for there is no possible combination of capital with strength to control all the coal-bearing lands in the United States.

With local associations, bureaus, and other groups in every field and market center, the producers, wholesalers, and retail dealers in coal have their respective national organizations; but with all these the coal industry is unorganized. One reason is that for the most part such associations as we now have are new, the product of the war. They did not have being in the dull times before the war started on the other side. But the real reason why, with all its associations, the coal industry is unorganized is that the law prohibits combined action with respect to the vital concerns of the trade—price and distribution. It is interesting to note that as late as 1888 the output from the coal fields then shipping to the Atlantic seaboard—seven in number—was controlled both as to tonnage and price by a combination of producers known as the Seaboard Association. The percentage of the expected demand on the tidewater market was predetermined and allocated to each field by a governing board composed of operators from each district. Shipments from the fields were confined to the demand, so as not to flood the market, and prices were fixed by a majority vote of the governing board.

Such combinations of course passed out with the incoming of the Sherman Law, and today it is, and for thirty years has been, a case of each shipper for himself and the devil take the hindmost. The past four years have been profitable for the coal trade, but for this the coal

man can claim no responsibility. Conditions absolutely outside his control have given to coal a remarkably steady market at good prices, the four years considered as a whole. It is, however, not hard to speculate as to what would have been the position of the bituminous coal industry if in 1914 the war had not affected conditions so fundamentally.

In a "Statement of Facts" issued Dec. 1, 1914, or six years ago, the operators of Illinois and Indiana set forth for the President of the United States and the public the condition of their industry. Declaring that the normal state of their industry for some years had been such as to "endanger lives of the miners, waste the coal reserves, and deprive the operators of any hope of profit; that, subject to inter-state laws governing combinations respecting prices and distribution and to state laws governing the mining, fastened between combinations of buyers on the one side and labor unions on the other, they, the operators, found themselves unable to prevent waste or to enjoy sufficient profit, if at times they could make any profit, to properly equip their properties for the protection of their miners. Asking that special attention be given the needs of the coal industry in the appointment of the then newly authorized Federal Trade Commission, these operators said, "There is no desire now or hereafter to establish a coal monopoly. Much less is there a desire to extort unreasonable profits." They invited "appropriate and definite governmental control" to the extent "at least of permitting all of their activities to be known to the public." "Coal operators would not object to, but, on the contrary, would invite such publicity and supervision."

How desperate these operators considered their condition in 1914 is evidenced by these published statements. Had not the conditions surrounding their markets been violently changed by the war, they would have indeed been in desperate straits by this time. Now, the fundamental conditions have not changed from prewar times. Coal operators are no more permitted now to combine in setting prices or in controlling distribution than they were six years ago. They are today confronted by the same labor unions and the same combinations of large steam coal buyers. They are today picking up the threads of the story where they left off six years ago.

Consumption of coal in the United States is inelastic. No more coal is consumed than is needed to perform the work at hand or to give the necessary heat. No considerations of price will induce a manufacturer to burn more coal than is required to produce the goods for which he has a market. As householders we consume no more coal than we need to keep warm: no matter how low the price and no matter how high the price, we require a certain minimum. As differing from consumption, however, is demand. Although a consumer will in a given period burn

no more than is required, he may for different reasons buy more or less than he burns, adding to or taking from storage to make up the difference. No one in the industry can increase or decrease this demand. The consumer is the arbiter of the destiny of the coal producer, and is fast becoming an important factor in the production of coal. It is roughly estimated that 30 per cent of the coal produced comes from mines owned by and operated for the consumer. In fact, because of this and the inability of the coal men to organize for selling, the consumer today holds the balance of power. In view of the history of coal prices this past season, it may sound strange to say that the consumer holds the balance of power. The high prices of this year were made by the consumer, and had he exercised his power there would have been no such prices. It was not combination among the coal producers or shippers that caused ten dollar coal this year, nor was it lack of mines and miners to produce all the coal for which there was demand. We are all familiar with the theory of the law of supply and demand—that as demand increases and prices rise production will be called forth by the higher prices to meet this demand, and when output meets demand prices will fall. This would inevitably have happened in coal but for the fact that the link between producer and consumer, the railroad, failed to meet the demand placed on it. High prices could not affect the rate of production after the railroads had reached the limit of power to carry the coal.

Coal at the mine this summer was no more worth the ten dollars it too frequently brought than it is today. What buyers were paying for was coal plus transportation. The place value of coal this past season has been magnificent, from the standpoint of the seller who was in position to deliver. It was coal in a car that was worth money, not coal in the mine. Today producers of coal are competing with each other at the buyer's door; last summer they were competing for cars at the mines.

You will hear something later on about the irregularity of operation in the bituminous coal industry. There is a form of irregularity of operation of coal mines that is not social in the sense that it is due to general economic conditions, to seasons, or to car supply. It is the variation in operation between adjacent plants due to differences in the ability of the owner to sell his product. When the coal market is easy, when buyers must be approached with offers, then the coal that is off grade is moved with difficulty and the mine from which it comes and the labor that produces it are idle much of the time. The average running time that shows in our statistics is not the figure for each property.

One of the commonest causes for variations in the rate of production from mines in the same field in periods of slack demand for coal is the

adopted policy of the railroads to buy their fuel in part with assigned cars. When not abused by the railroad, the practice of contracting to supply the output of a mine to the railroad with an assured supply of cars, no matter how short the field may later be, is a business venture. The railroad gets a low price because giving a steady and fairly continuous market; the operator takes a small but certain gain in preference to gambling on the chance of higher prices in the open market during the life of his contract. But the result is that under this system we have some mines always at work and others idle.

The bituminous coal operators are not unanimous in condemning the assigned car practice, but the majority are opposed; and through the National Coal Association they have instituted suits to abolish it, under the provisions of the Transportation Act. For obvious reasons, the miners union is also opposed to the use of assigned cars and the idleness of some mines while others are working full time. Private cars, those owned by the coal-mine operator or the consumer, are always assigned; they can be used only at the mines to which they belong. It has become quite a common practice for concerns to purchase open-top equipment as a protection for their business. One large company in the East has built up a remarkable business to tidewater owing to its ability to guarantee delivery of coal, because of the cars it owns. The steel companies are large owners of private cars.

A new question has arisen in respect to these cars. On certain railroads the trackage, terminals, and motive power are not sufficient to give 100 per cent service to all the mines if all mines have orders for all their coal and the railroad has sufficient cars for all the business offered. On these roads are large interests owning both mines and cars, and these interests have so far been given service in preference to the mines depending on railroad owned cars. We have here a condition not of car shortage, but of transportation shortage.

The tendency is toward greater use of machinery in mining. For four years the urge has been for machines to gain larger tonnages; now it will be as in the years before the war to make for lower costs. More than half the bituminous coal mined is undercut by machines, and today equipment manufacturers are developing loading machines that promise to still further increase the output per man per day. A machine has been successfully developed that cuts the coal from the face, picks it down, and loads it into mine cars in one continuous operation.

No survey of the bituminous coal industry could be complete without reference to labor. The cost of labor and the labor cost are both items of importance to the coal producer and to the consumer as well. The cost of mine labor, that is, the wages paid, are the highest today they ever have been. They are too high to be permanent. Common

labor, the day-wage man, gets \$7.50 per day compared with \$2.85 in 1916. One reason this wage is so high is that the days worked are less than full time; the other reason is that the miner is so well organized that he has been able to secure his share of the profits of the coal business in the past few years. As the period of large profits is over for a time at least, if not for all time should Senator Calder have his way, the wage of the mine worker must come down. The country must have coal as cheap as possible, and labor cost represents about three quarters of the total expense of getting the coal and loading it on the railroad cars. For every dollar of mine cost the wages take nearly 75 cents.

The coal mine workers are among those best organized of all classes of workmen. When the call for the strike of last year was issued, seven out of every ten men in the soft coal mines of the United States responded.

The great markets for bituminous coal are the railroads, manufacturing industries, steamship bunkers, and coke and gas plants. The greatest density of industry, rail traffic, and steamship demand is in the eastern part of the United States. The mines serving that territory therefore have the steadiest demand for their product. As we go westward, the use of soft coal for heating increases and we find the demand more seasonal and the market less steady. Considered broadly, therefore, the mines in the East have the best running time, those in the Middle West rank next, and in the West the finding of a market in the summer time is a serious problem.

A new element has been introduced into the market problem of the bituminous coal industry in the foreign demand. This demand can only be satisfied, from the very nature of things, by the mines in the East that already have the best potential demand for their product. For this reason the production of coal in the Appalachian region this past year has been of utmost interest to all who have been watching the shortage. The West and Middle West were recognized as being fully able to take care of themselves, but would the East be able to meet the demand at home and at the same time fill a large foreign demand? It has been done, but only by concentrated effort on the part of the railroads and the coal men. A condition of shortage may always be expected to develop first in the East and to disappear there last.

Much has been said about the coal contract. In the days before the war it was the coal operator who was complaining that the contract he had with the consumer was not worth the paper it was written on, because the buyer could and did suspend shipments on it at his pleasure and did not hesitate to refuse contract coal when he could get coal in the open market at lower prices. That is happening today. But, in the meantime, the shipper has altogether too often taken advantage of



the vulnerability of the coal contract to sell his coal in the open market at high prices instead of meeting his obligations.

Shippers of coal contend that so long as they can not be sure of cars in which to load their coal, they cannot make hard and fast contracts to deliver. The car supply clause in coal contracts is the joker no one has been able to completely eliminate as yet. With the experience of the past four years behind him, no vender of coal would be warranted in giving an absolute guarantee of delivery without charging well for it; and the market will not stand such an addition to price on the part of any one or of a few shippers. A more or less complete change in the methods of marketing coal must be had before the ideal of binding contracts in coal are realized.